

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN THE APPLICATION OF: DIANE M. ARTMAN, ET AL.

DOCKET NO.: 3226-01

CUSTOMER NUMBER: 26645

SERIAL NO.: 10/554,481

EXAMINER: T. OLADAPO

FILED: OCTOBER 24, 2005

GROUP ART UNIT: 1797

TITLE: DIESEL LUBRICANT LOW IN SULFUR AND PHOSPHORUS

November 10, 2010

Wickliffe, Ohio

Hon. Commissioner for Patents

P. O. Box 1450

Alexandria, VA 22313-1450

Sir:

**RESPONSE AND REQUEST FOR RECONSIDERATION**

The following remarks and data are submitted in response to the final office action dated September 17, 2010. Reconsideration is requested at this time because it is believed that the claims are in condition for allowance.

The present invention relates to lubrication of a sump-lubricated, compression ignited (that is, diesel) engine. The lubricant contains a substantially nitrogen-free sulfurized olefin antiwear agent and about 1 to about 10% of a nitrogen-containing dispersant. It is a low phosphorus, low sulfur, relatively low ash composition, as specified in claim 1.

The Examiner has repeated his rejection of claim 1 and most of the dependent claims as obvious over Nakazato et al., JP 2002-053888 (available as a machine translation). The Examiner indicated that, indeed, improved antiwear performance is shown by the presence of sulfurized olefins. However, the Examiner noted that that the experiments failed to consider compositions of Nakazato that comprise sulfurized olefins. Applicants respectfully traverse.

There are in fact two specific features in the present claims that are not disclosed, in combination, by Nakazato: the presence of the sulfurized olefin, and a higher sulfated ash level. The present claims specify sulfated ash of about 1%, that is, 0.8% to less than about 1.2%. The general teaching in Nakazato as to ash is that it should be "a

---

**CERTIFICATE OF EFS SUBMISSION (37 C.F.R. § 1.8(a)(1)(C))**

I hereby certify that this correspondence is being filed electronically via the USPTO EFS to the Commissioner for Patents, United States Patent & Trademark Office, in accordance with §1.6(a)(4) on:

November 22, 2010

Date of Deposit

/Janet Farr/

Deposited by: Janet Farr